

Nat'l Highway Traffic Safety Admin., DOT

§572.177

- (1) Pendulum acceleration, CFC 180,
- (2) Pendulum D-plane rotation (if transducer is used), CFC 60,
- (3) Torso flexion pulling force (if transducer is used), CFC 60,
- (4) Head acceleration, CFC 1000,
- (5) Neck forces, upper and lower, CFC 1000,
- (6) Neck moments, upper and lower, CFC 600,
- (7) Thorax CG acceleration, CFC 180,
- (8) Sternum deflection, Class 600,
- (9) Sternum and rib accelerations, Class 1000,
- (10) Spine accelerations, CFC 180,
- (11) Lumbar forces, CFC 1000,
- (12) Lumbar moments, CFC 600,
- (13) Shoulder forces, CFC 180,
- (14) Pelvis accelerations, CFC 1000,
- (15) Iliac forces, CFC 180,
- (16) Femur and tibia forces, CFC 600,
- (17) Femur and tibia moments, CFC 600.
- (d) Coordinate signs for instrumentation polarity are to conform to SAE In-

formation Report J1733 (incorporated by reference, see §572.170).

(e) The mountings for sensing devices have no resonant frequency less than 3 times the frequency range of the applicable channel class.

(f) Limb joints are set at one G, barely restraining the weight of the limb when it is extended horizontally. The force needed to move a limb segment is not to exceed 2G throughout the range of limb motion.

(g) Performance tests of the same component, segment, assembly, or fully assembled dummy are separated in time by not less than 30 minutes unless otherwise noted.

(h) Surfaces of dummy components may not be painted except as specified in this subpart or in drawings subtended by this subpart.

**APPENDIX—FIGURES TO SUBPART T OF
PART 572**

FIGURE T1
HEAD DROP TEST SET-UP SPECIFICATIONS

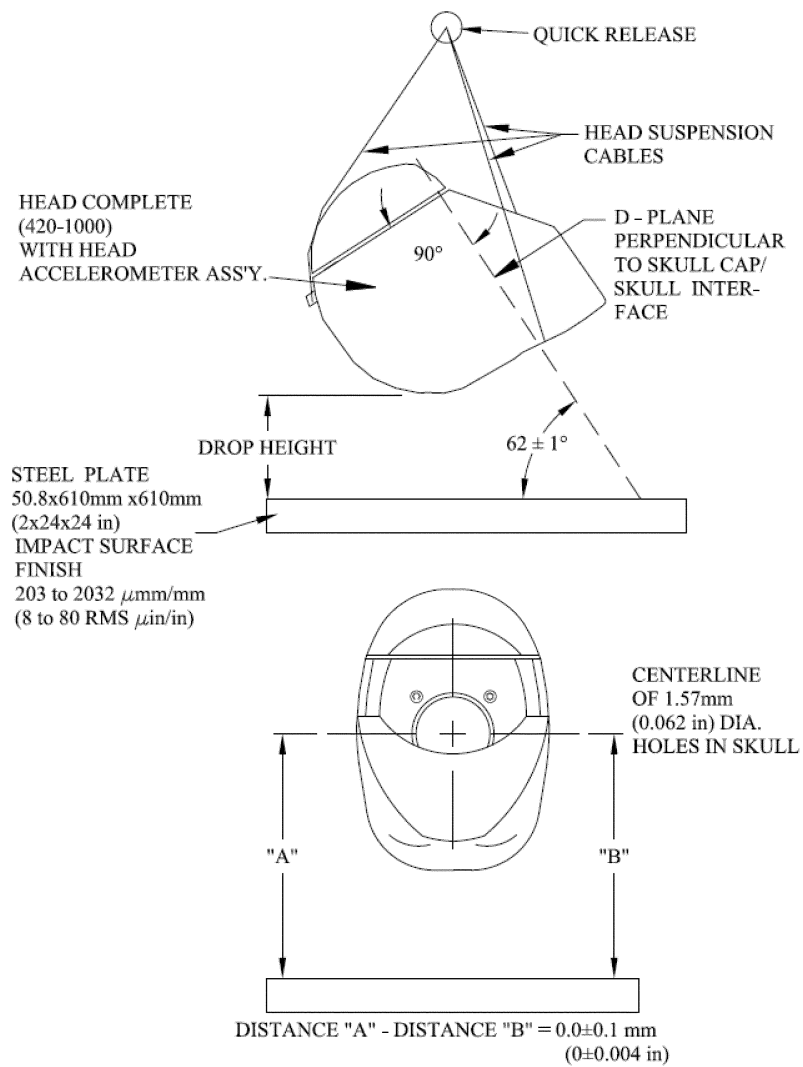


FIGURE T2
NECK FLEXION TEST SET-UP SPECIFICATIONS

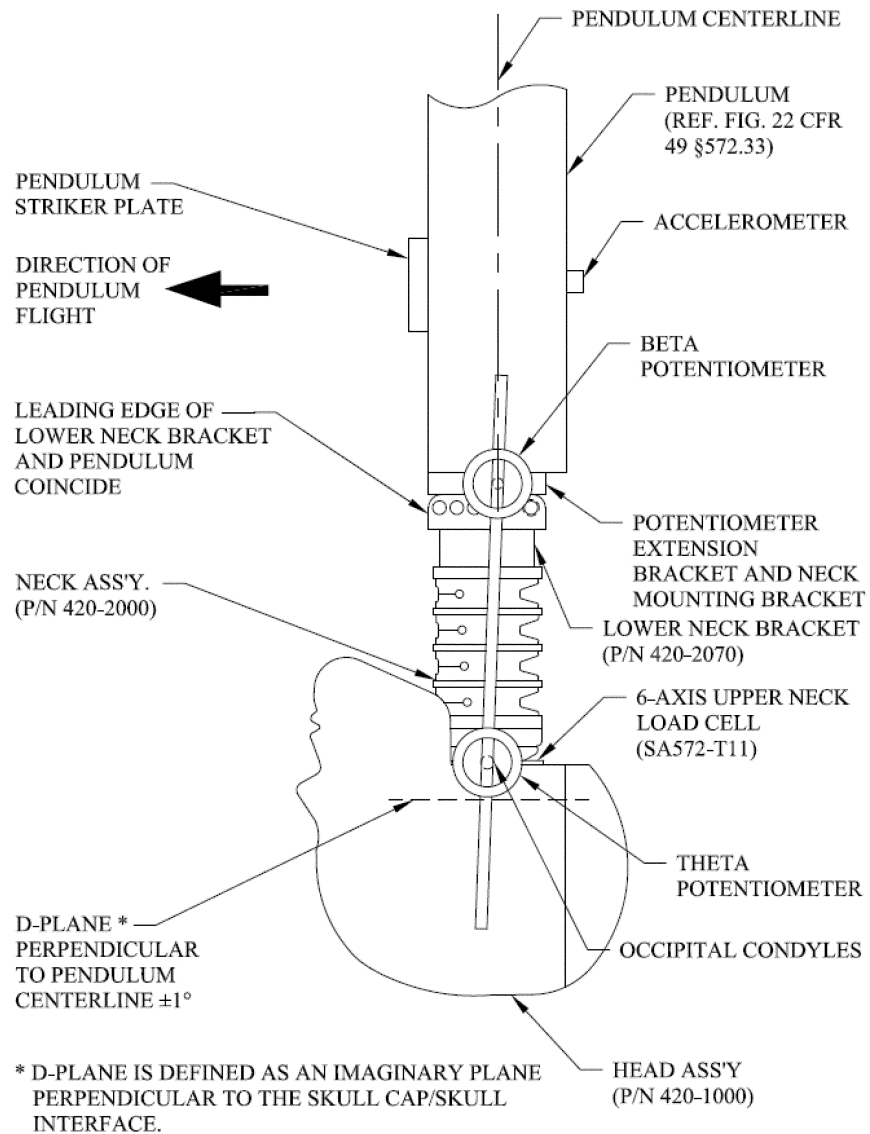


FIGURE T3
NECK EXTENSION TEST SET-UP SPECIFICATIONS

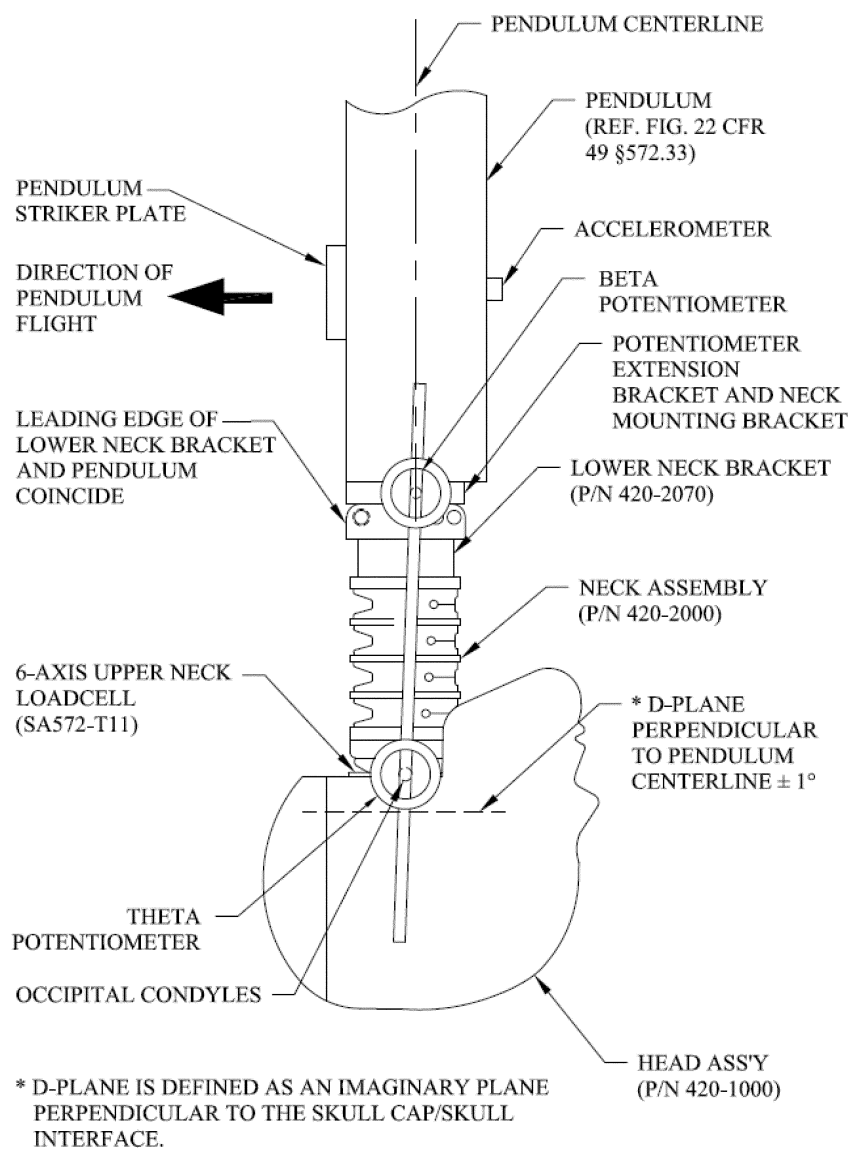


FIGURE T4
THORAX IMPACT TEST SET-UP SPECIFICATIONS

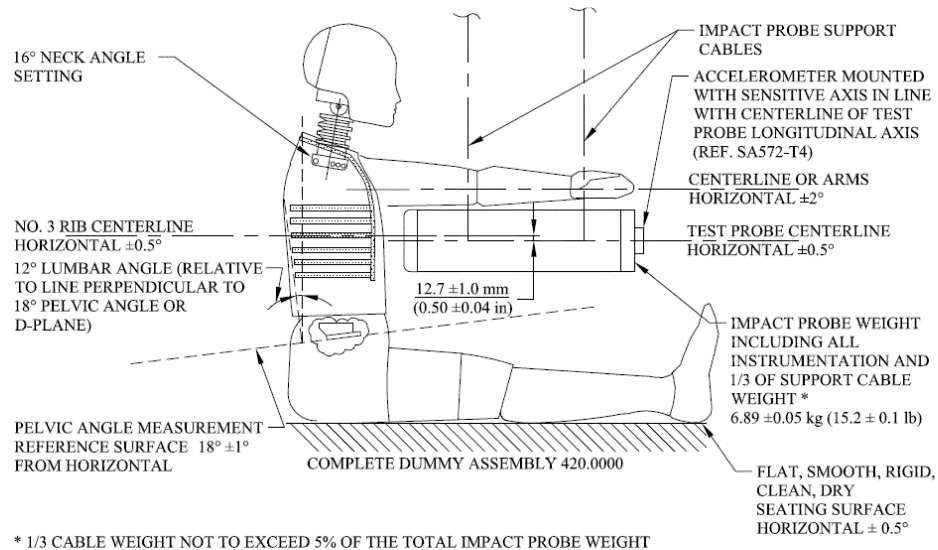


FIGURE T5
TORSO FLEXION TEST SETUP SPECIFICATIONS

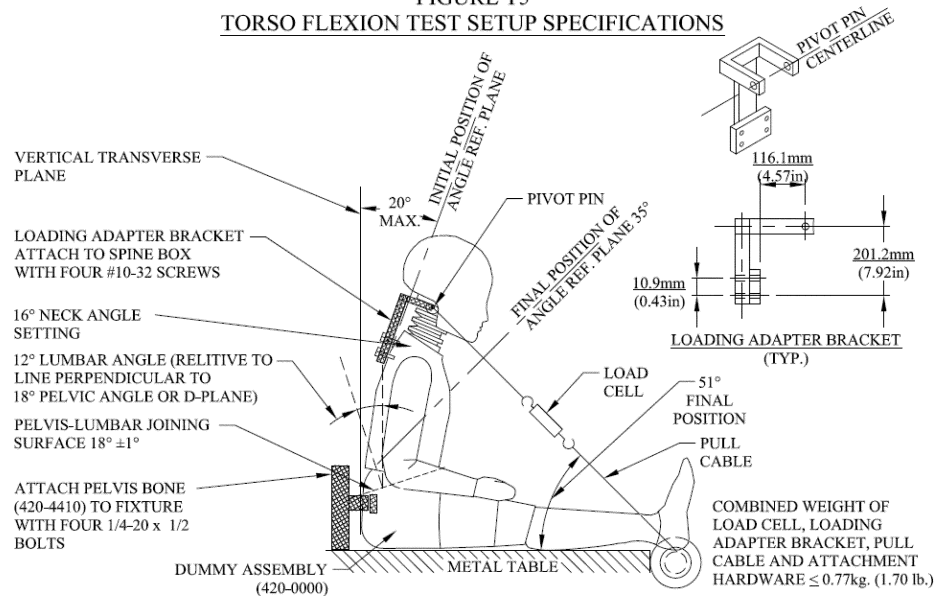
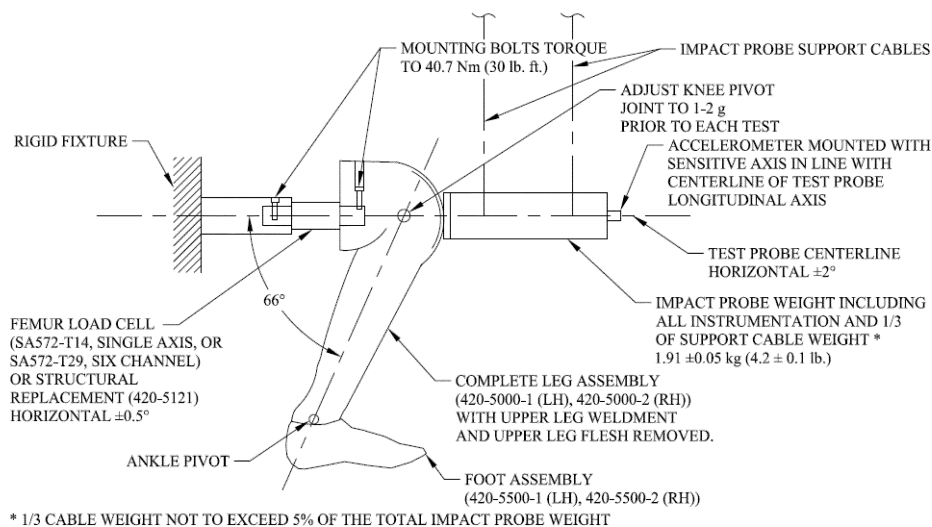


FIGURE T6
KNEE IMPACT TEST SET-UP SPECIFICATIONS



Subpart U, ES-2re Side Impact Crash Test Dummy, 50th Percentile Adult Male

SOURCE: 71 FR 75331, Dec. 14, 2006, unless otherwise noted.

§ 572.180 Incorporated materials.

(a) The following materials are hereby incorporated into this Subpart by reference:

(1) A parts/drawing list entitled, "Parts/Drawings List, Part 572 Subpart U, Eurosid 2 with Rib Extensions (ES2re), September 2009," incorporated by reference in § 572.181.

(2) A drawings and inspection package entitled "Parts List and Drawings, Part 572 Subpart U, Eurosid 2 with Rib Extensions (ES-2re, Alpha Version), September 2009," consisting of:

(i) Drawing No. 175-0000, ES-2re Dummy Assembly, incorporated by reference, see §§ 572.181, 575.182, 572.184;

(ii) Drawing No. 175-1000, Head Assembly, incorporated by reference in §§ 572.181 and 572.182;

(iii) Drawing No. 175-2000, Neck Assembly Test/Cert, incorporated by reference in §§ 572.181 and 572.183;

(iv) Drawing No. 175-3000, Shoulder Assembly, incorporated by reference in §§ 572.181 and 572.184;

(v) Drawing No. 175-3500, Arm Assembly, Left, incorporated by reference in §§ 572.181 and 572.185;

(vi) Drawing No. 175-3800, Arm Assembly, Right, incorporated by reference in §§ 572.181, and 572.185;

(vii) Drawing No. 175-4000, Thorax Assembly with Rib Extensions, incorporated by reference in §§ 572.181 and 572.185;

(viii) Drawing No. 175-5000, Abdominal Assembly, incorporated by reference in §§ 572.181 and 572.186;

(ix) Drawing No. 175-5500, Lumbar Spine Assembly, incorporated by reference in §§ 572.181 and 572.187;

(x) Drawing No. 175-6000, Pelvis Assembly, incorporated by reference in §§ 572.181 and 572.188;

(xi) Drawing No. 175-7000-1, Leg Assembly—left incorporated by reference in § 572.181;

(xii) Drawing No. 175-7000-2, Leg Assembly—right incorporated by reference in § 572.181;